AUTHOR INDEX TO VOLUME 141

ACTION INDEX TO VOLUME TO	
Aguilar, A., see R. Sayós	141 (1990) 401
Anderson, M.R., see A.E. Russell	141 (1990) 41
Badiali, J.P. and F. Forstmann, Long-range correlation between polar molecules adsorbed	
onto a dielectric solid	141 (1990) 63
Balter, A., see O. Rolinski	141 (1990) 265
Baňacký, P., Effective two-level reduction of N-level system dissipative quantum dynamics	141 (1990) 249
Bertrán, J., see M.N.D.S. Cordeiro	141 (1990) 379
Bianucci, M., M. Maestro and P. Walde, Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hydrolytic reactions	141 (1990) 273
Botschwina, P. and P. Sebald, Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+	141 (1990) 311
Brudzynski, R.J., see R.J. Sension	141 (1990) 393
Chaffins, S.A., see B.E. Kahn	141 (1990) 21
Clavilier, J., K. El Achi and A. Rodes, In situ probing of step and terrace sites on Pt(S)-	141 (1770) 21
$[n(111)\times(111)]$ electrodes	141 (1990) 1
Cook, J.P.D., R. Pascual, E. Weigold, W. von Niessen and P. Tomasello, An experimental	(.,,,,
and theoretical investigation of the valence orbital momentum distributions and bind-	
ing energy spectra of nitrogen	141 (1990) 211
Cordeiro, M.N.D.S., J.A.N.F. Gomes, A. Gonzàlez-Lafont, J.M. Lluch and J. Bertrán, The	
role of many-body interactions in the stability of hydrated Cu2+ clusters	141 (1990) 379
Costa, M., see A. Tadjeddine	141 (1990) 15
Dalton, E.F., N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray,	
Charge transport in electroactive polymers consisting of fixed molecular redox sites	141 (1990) 143
Daudey, JP., see M. Merchan	141 (1990) 285
De Almeida, W.B., An ab initio study of the CO ₂ C ₂ H ₂ binary complex	141 (1990) 297
Dean, M.H., see P. Meisterjahn	141 (1990) 131
Eichberger, R. and F. Willig, Ultrafast electron injection from excited dye molecules into	
semiconductor electrodes	141 (1990) 159
El Achi, K., see J. Clavilier	141 (1990) 1
Facci, J.S., see E.F. Dalton	141 (1990) 143
Forstmann, F., see J.P. Badiali	141 (1990) 63
Frisch, M., M. Head-Gordon and J. Pople, Direct analytic SCF second derivatives and	
electric field properties	141 (1990) 189
García-Ayllón, A. and J. Santamaría, Stretch-bend coupling effect on the intramolecular	
vibrational relaxation in a two-mode model of CH overtone excited fluoroform	141 (1990) 197

AUTHOR INDEX TO VOLUME 141

ACTION INDEX TO VOLUME TO	
Aguilar, A., see R. Sayós	141 (1990) 401
Anderson, M.R., see A.E. Russell	141 (1990) 41
Badiali, J.P. and F. Forstmann, Long-range correlation between polar molecules adsorbed	
onto a dielectric solid	141 (1990) 63
Balter, A., see O. Rolinski	141 (1990) 265
Baňacký, P., Effective two-level reduction of N-level system dissipative quantum dynamics	141 (1990) 249
Bertrán, J., see M.N.D.S. Cordeiro	141 (1990) 379
Bianucci, M., M. Maestro and P. Walde, Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hydrolytic reactions	141 (1990) 273
Botschwina, P. and P. Sebald, Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+	141 (1990) 311
Brudzynski, R.J., see R.J. Sension	141 (1990) 393
Chaffins, S.A., see B.E. Kahn	141 (1990) 21
Clavilier, J., K. El Achi and A. Rodes, In situ probing of step and terrace sites on Pt(S)-	141 (1770) 21
$[n(111)\times(111)]$ electrodes	141 (1990) 1
Cook, J.P.D., R. Pascual, E. Weigold, W. von Niessen and P. Tomasello, An experimental	(.,,,,
and theoretical investigation of the valence orbital momentum distributions and bind-	
ing energy spectra of nitrogen	141 (1990) 211
Cordeiro, M.N.D.S., J.A.N.F. Gomes, A. Gonzàlez-Lafont, J.M. Lluch and J. Bertrán, The	
role of many-body interactions in the stability of hydrated Cu2+ clusters	141 (1990) 379
Costa, M., see A. Tadjeddine	141 (1990) 15
Dalton, E.F., N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray,	
Charge transport in electroactive polymers consisting of fixed molecular redox sites	141 (1990) 143
Daudey, JP., see M. Merchan	141 (1990) 285
De Almeida, W.B., An ab initio study of the CO ₂ C ₂ H ₂ binary complex	141 (1990) 297
Dean, M.H., see P. Meisterjahn	141 (1990) 131
Eichberger, R. and F. Willig, Ultrafast electron injection from excited dye molecules into	
semiconductor electrodes	141 (1990) 159
El Achi, K., see J. Clavilier	141 (1990) 1
Facci, J.S., see E.F. Dalton	141 (1990) 143
Forstmann, F., see J.P. Badiali	141 (1990) 63
Frisch, M., M. Head-Gordon and J. Pople, Direct analytic SCF second derivatives and	
electric field properties	141 (1990) 189
García-Ayllón, A. and J. Santamaría, Stretch-bend coupling effect on the intramolecular	
vibrational relaxation in a two-mode model of CH overtone excited fluoroform	141 (1990) 197

Gomes, J.A.N.F., see M.N.D.S. Cordeiro	141 (1990) 379
González, M., see R. Sayós	141 (1990) 401
Gonzàlez-Lafont, A., see M.N.D.S. Cordeiro	141 (1990) 379
Gonzalez-Luque, R., see M. Merchan	141 (1990) 285
Gui, J.Y., see B.E. Kahn	141 (1990) 21
Head-Gordon, M., see M. Frisch	141 (1990) 189
Henderson, D., Explicit formulae for the ion and solvent profiles in the electric double	
layer using the mean spherical approximation	141 (1990) 79
Hopkirk, A., see I.C. Walker	141 (1990) 365
Hubbard, A.T., see B.E. Kahn	141 (1990) 21
Hudson, B.S., see R.J. Sension	141 (1990) 393
Imre, D.G., see R.J. Sension	141 (1990) 393
Jernigan, J.C., see E.F. Dalton	141 (1990) 143
Jewsbury, P. and K. Lawley, A model for the relative intensities among ion pair→valence transitions in the heavier halogens and rare gas halides	141 (1990) 225
Kahn, B.E., S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard, Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates at Pt(111) with IR and Raman spectra of the unadsorbed organics	141 (1990) 21
Kannen, G. and A. Otto, Optical studies on the quenching of the SERS activity of silver	
electrodes	141 (1990) 51
Karpfen, A., see P.G. Szalay	141 (1990) 355
Kharkats, Yu.I. and J. Ulstrup, Dielectric image effects in environmental reorganization	
free energies and inter-reactant work terms of metalloprotein electron transfer reactions	141 (1990) 117
Kharlamov, B.M., see N.I. Ulitsky	141 (1990) 441
Kido, H., see N. Mikami	141 (1990) 431
Kikuma, J., see H. Umemoto	141 (1990) 457
Kowalczyk, A., see O. Rolinski	141 (1990) 265
Lawley, K., see P. Jewsbury	141 (1990) 225
Lischka, H., see P.G. Szalay	141 (1990) 355
Lluch, J.M., see M.N.D.S. Cordeiro	141 (1990) 379
Lu, F., see B.E. Kahn	141 (1990) 21
Lund, A., see L. Sjöqvist	141 (1990) 417
Maestro, M., see M. Bianucci	141 (1990) 273
Marsden, C.J. and B.J. Smith, The harmonic force field and r_z molecular structure of di-	
sulphur monoxide, S ₂ O	141 (1990) 325
Marsden, C.J. and B.J. Smith, An ab initio study of many isomers of S ₂ O ₂ . A combined theoretical and experimental analysis of the harmonic force field and molecular struc-	
ture of cis-planar OSSO	141 (1990) 335
Masaki, A., see H. Umemoto	141 (1990) 457
Meisterjahn, P., J.W. Schultze, B. Siemensmeyer, U. Stimming and M.H. Dean, Electron	
transfer reactions on passive iron electrodes	141 (1990) 131

Merchan, M., JP. Daudey, R. Gonzalez-Luque and I. Nebot-Gil, Analysis of the CIPSI/		001 555
DCCI approach to characterize the HF and F ₂ single bond	141 (19	90) 285
Mikami, N., R. Ohki and H. Kido, Photodissociation of jet-cooled acetylacetonato com-		
plexes of the first transition metals. Free metal generation and fragmentational ionization Mulder, W.H. and J.H. Sluyters, The impedance of a plane electrode with a circular elec-	141 (19	90) 431
tro-active area both in the ideally polarized and the activation-controlled case	141 (19	90) 105
Murray, R.W., see E.F. Dalton		90) 143
Nebot-Gil, I., see M. Merchan	141 (19	90) 285
Nordholm, S. and M.G. Sceats, The reduction of dissociation/recombination theory to one-		
dimensional form	141 (19	90) 261
Ohki, R., see N. Mikami	141 (19	90) 431
Otto, A., see G. Kannen	141 (19	90) 51
Palmer, M.H., see I.C. Walker	141 (19	90) 365
Pascual, R., see J.P.D. Cook	141 (19	90) 211
Personov, R.I., see N.I. Ulitsky	141 (19	90) 441
Pons, S., see A.E. Russell	141 (19	990) 41
Pople, J., see M. Frisch	141 (19	990) 189
Rahmani, A., see A. Tadjeddine	141 (19	990) 15
Richmond, G.L., see J.M. Robinson	141 (19	990) 175
Robinson, J.M. and G.L. Richmond, Time-resolved measurements of the electrodeposi- tion of thallium on silver electrodes by optical second-harmonic generation	141 (10	990) 175
Rodes, A., see J. Clavilier	141 (19	
Rolinski, O., A. Balter and A. Kowalczyk, Fluorescence decay of solvated polar molecules	141 (15	770) 1
in an electric field	141 (19	990) 265
Russell, A.E., S. Pons and M.R. Anderson, Infrared spectroelectrochemical measurements	141 (1)	770) 203
of the electrochemical double layer: using carbon monoxide as a double layer probe		
molecule	141 (19	990) 41
Santamaría I con A Carelo Avillón	141 (1	000) 107
Santamaría, J., see A. García-Ayllón Sato, S., see H. Umemoto		990) 197
Sayós, R., M. González and A. Aguilar, Classical dynamics of the $O(^3P)+CS(X^1\Sigma^+)\to CO(X^1\Sigma^+)+S(^3P)$ reaction on the ground triplet potential en-	141 (1:	990) 457
ergy surface	141 (10	990) 401
Sceats, M.G., see S. Nordholm		990) 261
Schmickler, W., A model for the adsorption of metal ions on single crystal surfaces		990) 95
Schultze, J.W., see P. Meisterjahn		990) 131
Sebald, P., see P. Botschwina		990) 311
Sension, R.J., R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre, Resonance emis-	141 (1	990) 311
sion studies of the photodissociating water molecule	141 (1	990) 393
Shiotani, M., see L. Sjöqvist	141 (1	990) 417
Shu, L. and G.J. Small, On the mechanism of nonphotochemical hole burning of optical		
transitions in amorphous solids	141 (1	990) 447
Siemensmeyer, B., see P. Meisterjahn	141 (1	990) 131

Sjöqvist, L., M. Shiotani and A. Lund, The structure of trans- and cis-3-hexene radical cations stabilised in halocarbon matrices at low temperature: an ESR and MNDO/AM1	
study	141 (1990) 417
Sluyters, J.H., see W.H. Mulder	141 (1990) 105
Small, G.J., see L. Shu	141 (1990) 447
Smith, B.J., see C.J. Marsden	141 (1990) 325
Smith, B.J., see C.J. Marsden	141 (1990) 335
Spohr, E., Computer simulation of the water/platinum interface. Dynamical results	141 (1990) 87
Stern, D.A., see B.E. Kahn	141 (1990) 21
Stimming, U., see P. Meisterjahn	141 (1990) 131
Surridge, N.A., see E.F. Dalton	141 (1990) 143
Szalay, P.G., A. Karpfen and H. Lischka, Geometry relaxation effects in the 1 B ₂ and 2 A ₁	,
states of cis-1,3-butadiene	141 (1990) 355
Tadjeddine, A., A. Rahmani and M. Costa, Optical behavior of liquid mercury-electrolyte	
interface studied by surface plasmon excitation	141 (1990) 15
Tomasello, P., see J.P.D. Cook	141 (1990) 211
Ulitsky, N.I., B.M. Kharlamov and R.I. Personov, Effect of a high magnetic field on the degenerate S-S transitions of organic molecules in amorphous matrices via hole burn-	
ing: Zn-phthalocyanine in polyvinylbutyral	141 (1990) 441
Ulstrup, J., see Yu.I. Kharkats	141 (1990) 117
Umemoto, H., A. Masaki, J. Kikuma and S. Sato, The energy pooling processes between	
$Zn(4^3P_J)$ atoms	141 (1990) 457
Von Niessen, W., see J.P.D. Cook	141 (1990) 211
Walde, P., see M. Bianucci	141 (1990) 273
Walker, I.C., M.H. Palmer and A. Hopkirk, The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold electron energy loss spectroscopy and ab	
initio multi-reference configuration interaction calculations	141 (1990) 365
Wallace, R., The torsional energy levels of ethylene: interpretation in terms of two internal modes	141 (1990) 241
Weigold, E., see J.P.D. Cook	141 (1990) 211
Wilbourn, K.O., see E.F. Dalton	141 (1990) 143
Willig, F., see R. Eichberger	141 (1990) 159
Tillig, 1., see IV. Lielloeiger	(1770) 137
Zhang, J., see R.J. Sension	141 (1990) 393

LIST OF SUBJECTS

1 METHODS

1.1 Theoretical

- Group theory and algebras 1.1.1
- Classical mechanics * 1.1.2
- 1.1.3 Quantized field theory
- 1.1.4 Many body and quasiparticle approaches *
- 1.1.5 Coupling schemes and perturbative treatments *
- 1.1.6 Relativistic quantum mechanics
- 117 Transport quantum mechanics *
- 1.1.8 Equilibrium statistical mechanics *
- 1.1.9 Statistical mechanics of stationary states
- 1.1.10 Non-equilibrium thermodynamic and hydrodynamic theories *
- 1.1.11 Ab initio schemes for stationary properties *
- 1.1.12 Computational and simulation methods *
- 1.1.13 Molecular dynamics and scattering theory *

1.2 Experimental

- 1.2.1 Magnetic resonances *
- 1.2.2 Cyclotron resonance
- 1.2.3 Microwave spectroscopy *
- 1.2.4 Infrared spectroscopy *
- 1.2.5 Raman spectroscopy *
- 1.2.6 Visible and UV spectroscopy *
- 1.2.7 Fluorescence spectroscopy *
- 1.2.8 Photoelectron and Auger spectroscopy
- 1.2.9 X-ray spectroscopy
- 1.2.10 Electron impact spectroscopy *
- 1.2.11 Laser methods *
- 1.2.12 Picosecond spectroscopy *
- 1.2.13 Non-linear optical spectroscopy *
- 1.2.14 Synchrotron spectroscopies *
- 1.2.15 Coherent optical spectroscopy
- 1.2.16 Optical pumping
- 1.2.17 Multiple resonance spectroscopy *
- 1.2.18 Optoacoustic spectroscopy
- 1.2.19 Atomic and molecular beam techniques
- 1.2.20 Time-resolved experiments *
- 1.2.21 Mass spectrometry *
- 1.2.22 Radiolysis
- 1.2.23 Mössbauer spectroscopy
- 1.2.24 X-ray, electron and neutron diffraction
- 1.2.25 Neutron scattering
- 1.2.26 Light scattering
- 1.2.27 Field emission and field ionization
- 1.2.28 Measurement of macroscopic variables *

2 OBJECTS

Bulk systems

- 2.1.1 Gases *
- 2.1.2 Supersonic beams *
- 2.1.3 Liquids neat
- 2.1.4 Liquid mixtures and solutions *
- 2.1.5 Crystals *
- 2.1.5.1 neat
- 2.1.5.2 mixed
- 2.1.6 Glasses
- 2.1.7 Liquid crystals
- 2.1.8 Polymers *
- Semiconductors * 2.1.9
- 2.1.10 Metals and alloys *
- 2.1.11 Thin films *
- 2.1.12 Surfaces *
- 2.1.13 Low-dimensional materials
- 2.1.14 Dielectrics *
- 2.1.15 Plasmas
- 2.1.16 Biological systems *

2.2 Microscopic systems

- 2.2.1 Atoms *
- 2.2.2 Molecules (neutral and ionic) *
- 2.2.2.1 diatomic *
- 2.2.2.2 small polyatomics *
- 2.2.2.3 aromatics
- 2.2.2.4 other large *
- 2.2.2.5 polymeric and biological
- 2.2.3 Molecular aggregates *
- 2.2.3.1 dimers
- 2.2.3.2 van der Waals molecules
- 2.2.3.3 clusters *
- 2.2.3.4 complexes *
- 2.2.4 Free radicals (including hydronium and muonium) *
- 2.2.5 Quasiparticles (including excitons)
- 2.2.6 Defects and impurities
- 2.2.7 Ions and charge carriers *

^{*} Denotes subjects covered in this volume

3 PHENOMENA

3.1	Molecular structure *	3.17	Reactions (including dissociation) *
3.2	Vibrations and rotations of molecules *	3.17.1	gas phase *
3.3	Electronic structure and states *	3.17.2	condensed phase *
3.4	Electric and magnetic properties *	3.17.3	photochemical
3.5	Spin splittings	3.18	Tunnelling *
3.6	Optical activity	3.19	Electron transfer *
3.7	Molecular interactions *	3.20	Positron annihilation
3.8	Spectral bandshapes and intensities *	3.21	Ionization (including Rydberg states) *
3.9	Coupling of electronic and nuclear motion *	3.22	Molecular motion (including diffusive) *
3.10	Energy transfer processes *	3.23	Isotopic effects
3.11	Molecular photophysical processes *	3.24	Fluctuations and noise
3.12	Intramolecular dynamics *	3.25	Collective motion and excitations
3.12.1	radiationless transitions *	3.26	Surface effects and catalysis *
3.12.2	vibrational energy redistribution (including	3.27	Thermodynamic and transport properties *
	vibrational dissociation) *	3.28	Structure of solids and liquids *
3.13	Luminescence spectra, yields and lifetimes	3.29	Critical phenomena
3.14	Coherence loss processes	3.30	Phase transitions
3.15	Non-linear responses (including optical) *		

3.16

Multiphoton phenomena *

SUBJECT INDEX TO VOLUME 141

METHODS

Theoretical

Classical mechanics	
Stretch-bend coupling effect on the intramolecular vibrational relaxation in a two-mode model of CH overtone excited fluoroform, A. García-Ayllón and J. Santamaría	141 (1990) 197
Many body and quasiparticle approaches	
A model for the adsorption of metal ions on single crystal surfaces, W. Schmickler An experimental and theoretical investigation of the valence orbital momentum distri- butions and binding energy spectra of nitrogen, J.P.D. Cook, R. Pascual, E. Weigold,	141 (1990) 95
W. von Niessen and P. Tomasello	141 (1990) 211
Coupling schemes and perturbative treatments	
A model for the relative intensities among ion pair →valence transitions in the heavier halogens and rare gas halides, P. Jewsbury and K. Lawley	141 (1990) 225
The torsional energy levels of ethylene: interpretation in terms of two internal modes,	141 (1990) 223
R. Wallace	141 (1990) 241
Transport quantum mechanics	
Effective two-level reduction of N-level system dissipative quantum dynamics, P. Baňacký	141 (1990) 249
Equilibrium statistical mechanics	
Long-range correlation between polar molecules adsorbed onto a dielectric solid, J.P. Badiali and F. Forstmann	141 (1990) 63
Explicit formulae for the ion and solvent profiles in the electric double layer using the mean	141 (1770) 03
spherical approximation, D. Henderson	141 (1990) 79
Non-equilibrium thermodynamic and hydrodynamic theories	
Dielectric image effects in environmental reorganization free energies and inter-reactant work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 117
The reduction of dissociation/recombination theory to one-dimensional form, S. Nordholm	141 (1770) 117
and M.G. Sceats	141 (1990) 261
Fluorescence decay of solvated polar molecules in an electric field, O. Rolinski, A. Balter and A. Kowalczyk	141 (1990) 265
Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hy-	, , , ,
drolytic reactions, M. Bianucci, M. Maestro and P. Walde	141 (1990) 273

Ab initio schemes for stationary properties	
Direct analytic SCF second derivatives and electric field properties, M. Frisch	
M. Head-Gordon and J. Pople The torsional energy levels of ethylene: interpretation in terms of two internal modes	141 (1990) 189
R. Wallace	141 (1990) 241
Analysis of the CIPSI/DCCI approach to characterize the HF and F ₂ single bond	l,
M. Merchan, JP. Daudey, R. Gonzalez-Luque and I. Nebot-Gil	141 (1990) 285
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+	,
P. Botschwina and P. Sebald	141 (1990) 311
The harmonic force field and r_z molecular structure of disulphur monoxide, S_2O C.J. Marsden and B.J. Smith), 141 (1990) 325
An ab initio study of many isomers of S ₂ O ₂ . A combined theoretical and experimenta	
analysis of the harmonic force field and molecular structure of cis-planar OSSO	
C.J. Marsden and B.J. Smith	141 (1990) 335
Geometry relaxation effects in the 1 ¹ B ₂ and 2 ¹ A ₁ states of cis-1,3-butadiene, P.G. Szalay	
A. Karpfen and H. Lischka	141 (1990) 355
The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold	, ,
electron energy loss spectroscopy and ab initio multi-reference configuration interaction	
calculations, I.C. Walker, M.H. Palmer and A. Hopkirk	141 (1990) 365
The role of many-body interactions in the stability of hydrated Cu ²⁺ clusters	, ,
M.N.D.S. Cordeiro, J.A.N.F. Gomes, A. González-Lafont, J.M. Lluch and J. Bertrán	141 (1990) 379
W.N.D.S. Coldeno, J.A.N.I. Collies, A. Colleagez-Latolit, J.M. Eldeli and J. Defitali	141 (1770) 317
Computational and simulation methods	
Computer simulation of the water/platinum interface. Dynamical results, E. Spohr	141 (1990) 87
The impedance of a plane electrode with a circular electro-active area both in the ideall	ly
polarized and the activation-controlled case, W.H. Mulder and J.H. Sluyters	141 (1990) 105
Stretch-bend coupling effect on the intramolecular vibrational relaxation in a two-mod	le
model of CH overtone excited fluoroform, A. García-Ayllón and J. Santamaría	141 (1990) 197
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
The role of many-body interactions in the stability of hydrated Cu ²⁺ clusters	S,
M.N.D.S. Cordeiro, J.A.N.F. Gomes, A. Gonzàlez-Lafont, J.M. Lluch and J. Bertrán	141 (1990) 379
Resonance emission studies of the photodissociating water molecule, R.J. Sension	n,
R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre	141 (1990) 393
Classical dynamics of the $O({}^{3}P) + CS(X^{1}\Sigma^{+}) \rightarrow CO(X^{1}\Sigma^{+}) + S({}^{3}P)$ reaction on the groun	d
triplet potential energy surface, R. Sayós, M. González and A. Aguilar	141 (1990) 401
Molecular dynamics and scattering theory	
Stretch-bend coupling effect on the intramolecular vibrational relaxation in a two-mod	le
model of CH overtone excited fluoroform, A. García-Ayllón and J. Santamaría	141 (1990) 197
Effective two-level reduction of N-level system dissipative quantum dynamics, P. Baňack	, , , , , , , , , , , , , , , , , , , ,
Resonance emission studies of the photodissociating water molecule, R.J. Sension	
R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre	141 (1990) 393
Classical dynamics of the $O({}^{3}P) + CS(X^{1}\Sigma^{+}) \rightarrow CO(X^{1}\Sigma^{+}) + S({}^{3}P)$ reaction on the groun	
triplet potential energy surface, R. Sayós, M. González and A. Aguilar	141 (1990) 401
triplet potential onergy surface, it out on, it. contains and it. Against	*** (****) 101

Experimental

11	
Magnetic	resonances

The structure of trans- and cis-3-hexene radical cations stabilised in halocarbon matrices at low temperature: an ESR and MNDO/AM1 study, L. Sjöqvist, M. Shiotani and A. Lund

141 (1990) 417

Microwave spectroscopy

The harmonic force field and r_z molecular structure of disulphur monoxide, S_2O , C.J. Marsden and B.J. Smith

141 (1990) 325

An ab initio study of many isomers of S₂O₂. A combined theoretical and experimental analysis of the harmonic force field and molecular structure of cis-planar OSSO, C.J. Marsden and B.J. Smith

141 (1990) 335

Infrared spectroscopy

Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates at Pt(111) with IR and Raman spectra of the unadsorbed organics, B.E. Kahn, S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard

141 (1990) 21

The harmonic force field and r_z molecular structure of disulphur monoxide, S_2O , C.J. Marsden and B.J. Smith

141 (1990) 325

Raman spectroscopy

Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates at Pt(111) with IR and Raman spectra of the unadsorbed organics, B.E. Kahn, S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard

141 (1990) 21

Optical studies on the quenching of the SERS activity of silver electrodes, G. Kannen and A. Otto

141 (1990) 51

Resonance emission studies of the photodissociating water molecule, R.J. Sension, R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre

141 (1990) 393

Visible and UV spectroscopy

Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals. Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido

141 (1990) 431

Effect of a high magnetic field on the degenerate S-S transitions of organic molecules in amorphous matrices via hole burning: Zn-phthalocyanine in polyvinylbutyral, N.I. Ulitsky, B.M. Kharlamov and R.I. Personov

141 (1990) 441

Fluorescence spectroscopy

Ultrafast electron injection from excited dye molecules into semiconductor electrodes, R. Eichberger and F. Willig

141 (1990) 159

A model for the relative intensities among ion pair →valence transitions in the heavier halogens and rare gas halides. P. Jewsbury and K. Lawley

141 (1990) 225

Fluorescence decay of solvated polar molecules in an electric field, O. Rolinski, A. Balter and A. Kowalczyk

141 (1990) 265

Electron impact spectroscopy	
Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates at Pt(111) with IR and Raman spectra of the unadsorbed organics, B.E. Kahn, S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard	141 (1990) 21
An experimental and theoretical investigation of the valence orbital momentum distributions and binding energy spectra of nitrogen, J.P.D. Cook, R. Pascual, E. Weigold,	
W. von Niessen and P. Tomasello The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold electron energy loss spectroscopy and ab initio multi-reference configuration interaction	141 (1990) 211
calculations, I.C. Walker, M.H. Palmer and A. Hopkirk	141 (1990) 365
Laser methods	
Resonance emission studies of the photodissociating water molecule, R.J. Sension, R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre	141 (1990) 393
Effect of a high magnetic field on the degenerate S-S transitions of organic molecules in amorphous matrices via hole burning: Zn-phthalocyanine in polyvinylbutyral,	
N.I. Ulitsky, B.M. Kharlamov and R.I. Personov	141 (1990) 441
On the mechanism of nonphotochemical hole burning of optical transitions in amorphous solids, L. Shu and G.J. Small	141 (1990) 447
Picosecond spectroscopy	
Ultrafast electron injection from excited dye molecules into semiconductor electrodes, R. Eichberger and F. Willig	141 (1990) 159
Non-linear optical spectroscopy	
On the mechanism of nonphotochemical hole burning of optical transitions in amorphous solids, L. Shu and G.J. Small	141 (1990) 447
Synchrotron spectroscopies	
The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold electron energy loss spectroscopy and ab initio multi-reference configuration interaction calculations, I.C. Walker, M.H. Palmer and A. Hopkirk	141 (1990) 365
Multiple resonance spectroscopy	
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals. Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431
Time-resolved experiments	
Time-resolved measurements of the electrodeposition of thallium on silver electrodes by optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141 (1990) 175
The energy pooling processes between Zn(4 ³ P _J) atoms, H. Umemoto, A. Masaki,	(,
J. Kikuma and S. Sato	141 (1990) 457
Mass spectrometry	
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals.	
Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431

Subject index

Measurement of macroscopic variables	
In situ probing of step and terrace sites on $Pt(S)-[n(111)\times(111)]$ electrodes, J. Clavilier,	
K. El Achi and A. Rodes	141 (1990) 1
The impedance of a plane electrode with a circular electro-active area both in the ideally	
polarized and the activation-controlled case, W.H. Mulder and J.H. Sluyters	141 (1990) 105
Electron transfer reactions on passive iron electrodes, P. Meisterjahn, J.W. Schultze,	
B. Siemensmeyer, U. Stimming and M.H. Dean	141 (1990) 131
OBJECTS	
Bulk systems	
Gases	
The energy pooling processes between Zn(4 ³ P _J) atoms, H. Umemoto, A. Masaki,	
J. Kikuma and S. Sato	141 (1990) 457
Communic brown	
Supersonic beams Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals.	
Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431
Liquid mixtures and solutions	
Fluorescence decay of solvated polar molecules in an electric field, O. Rolinski, A. Balter	
and A. Kowalczyk	141 (1990) 265
Crystals	
A model for the adsorption of metal ions on single crystal surfaces, W. Schmickler	141 (1990) 95
Polymers	
Charge transport in electroactive polymers consisting of fixed molecular redox sites, E.F. Dalton, N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray	141 (1990) 143
Semiconductors	
Ultrafast electron injection from excited dye molecules into semiconductor electrodes,	
R. Eichberger and F. Willig	141 (1990) 159
Mark and the	
Metals and alloys	141 (1000) 05
A model for the adsorption of metal ions on single crystal surfaces, W. Schmickler	141 (1990) 95
Thin films	
A model for the adsorption of metal ions on single crystal surfaces, W. Schmickler	141 (1990) 95
Electron transfer reactions on passive iron electrodes, P. Meisterjahn, J.W. Schultze,	
B. Siemensmeyer, U. Stimming and M.H. Dean	141 (1990) 131
Charge' transport in electroactive polymers consisting of fixed molecular redox sites,	141 (1000) 143
E.F. Dalton, N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray Time-resolved measurements of the electrodeposition of thallium on silver electrodes by	141 (1990) 143
optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141 (1990) 175
personal distributions and the control of the contr	(1220) 173

Surfaces		
In situ probing of step and terrace sites on $Pt(S)-[n(111)\times(111)]$ electrodes, J. Clavilier,		
K. El Achi and A. Rodes	141 (1990)	1
Optical behavior of liquid mercury-electrolyte interface studied by surface plasmon ex-		
citation, A. Tadjeddine, A. Rahmani and M. Costa	141 (1990)	15
Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates		
at Pt(111) with IR and Raman spectra of the unadsorbed organics, B.E. Kahn,		
S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard	141 (1990)	21
Infrared spectroelectrochemical measurements of the electrochemical double layer: using		
carbon monoxide as a double layer probe molecule, A.E. Russell, S. Pons and		
M.R. Anderson	141 (1990)	41 -
Optical studies on the quenching of the SERS activity of silver electrodes, G. Kannen and		
A. Otto	141 (1990)	51
Long-range correlation between polar molecules adsorbed onto a dielectric solid, J.P. Badiali		
and F. Forstmann	141 (1990)	63
Explicit formulae for the ion and solvent profiles in the electric double layer using the mean		
spherical approximation, D. Henderson	141 (1990)	79
Computer simulation of the water/platinum interface. Dynamical results, E. Spohr	141 (1990)	87
The impedance of a plane electrode with a circular electro-active area both in the ideally		
polarized and the activation-controlled case, W.H. Mulder and J.H. Sluyters	141 (1990) 1	05
Ultrafast electron injection from excited dye molecules into semiconductor electrodes,		
R. Eichberger and F. Willig	141 (1990) 1	59
Time-resolved measurements of the electrodeposition of thallium on silver electrodes by		
optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141 (1990) 1	75
Dielectrics		
Dielectric image effects in environmental reorganization free energies and inter-reactant		
work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 1	17
Biological systems		
Dielectric image effects in environmental reorganization free energies and inter-reactant		
work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 1	17
Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hy-	() .	
drolytic reactions, M. Bianucci, M. Maestro and P. Walde	141 (1990) 2	273
distriction, and extended the second	(/-	
Microscopic systems		
Atoms		
The energy pooling processes between $Zn(4^3P_J)$ atoms, H. Umemoto, A. Masaki,		
J. Kikuma and S. Sato	141 (1990) 4	157
Molecules (neutral and ionic)		
The reduction of dissociation/recombination theory to one-dimensional form, S. Nordholm		
and M.G. Sceats	141 (1990) 2	261
Fluorescence decay of solvated polar molecules in an electric field, O. Rolinski, A. Balter		
and A. Kowalczyk	141 (1990) 2	265
Geometry relaxation effects in the 1 ¹ B ₂ and 2 ¹ A ₁ states of cis-1,3-butadiene, P.G. Szalay,		
A. Karpfen and H. Lischka	141 (1990) 3	355

The structure of trans- and cis-3-hexene radical cations stabilised in halocarbon matrices at low temperature: an ESR and MNDO/AM1 study, L. Sjöqvist, M. Shiotani and A. Lund	141 (1990) 417
-diatomic	
An experimental and theoretical investigation of the valence orbital momentum distributions and binding energy spectra of nitrogen, J.P.D. Cook, R. Pascual, E. Weigold, W. von Niessen and P. Tomasello	141 (1990) 211
A model for the relative intensities among ion pair→valence transitions in the heavier halogens and rare gas halides, P. Jewsbury and K. Lawley	141 (1990) 225
Analysis of the CIPSI/DCCI approach to characterize the HF and F ₂ single bond, M. Merchan, JP. Daudey, R. Gonzalez-Luque and I. Nebot-Gil	141 (1990) 285
Classical dynamics of the $O({}^{3}P) + CS(X^{1}\Sigma^{+}) \rightarrow CO(X^{1}\Sigma^{+}) + S({}^{3}P)$ reaction on the ground	
triplet potential energy surface, R. Sayós, M. González and A. Aguilar	141 (1990) 401
-small polyatomics Stretch-bend coupling effect on the intramolecular vibrational relaxation in a two-mode	
model of CH overtone excited fluoroform, A. García-Ayllón and J. Santamaría	141 (1990) 197
The torsional energy levels of ethylene: interpretation in terms of two internal modes, R. Wallace	141 (1990) 241
Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+, P. Botschwina and P. Sebald	141 (1990) 311
Geometry relaxation effects in the 1 1B2 and 2 1A1 states of cis-1,3-butadiene, P.G. Szalay,	, , , ,
A. Karpfen and H. Lischka The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold electron energy loss spectroscopy and ab initio multi-reference configuration interaction	141 (1990) 355
calculations, I.C. Walker, M.H. Palmer and A. Hopkirk Resonance emission studies of the photodissociating water molecule, R.J. Sension,	141 (1990) 365
R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre	141 (1990) 393
-other large	
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals. Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431
Effect of a high magnetic field on the degenerate S-S transitions of organic molecules in amorphous matrices via hole burning: Zn-phthalocyanine in polyvinylbutyral,	
N.I. Ulitsky, B.M. Kharlamov and R.I. Personov	141 (1990) 441
Molecular aggregates	
Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hy- drolytic reactions, M. Bianucci, M. Maestro and P. Walde	141 (1990) 273
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
-clusters	
The role of many-body interactions in the stability of hydrated Cu ²⁺ clusters, M.N.D.S. Cordeiro, J.A.N.F. Gomes, A. Gonzàlez-Lafont, J.M. Lluch and J. Bertrán	141 (1990) 379
-complexes	
Effective two-level reduction of N-level system dissipative quantum dynamics, P. Baňacký	141 (1990) 249

Subject track	417
Free radicals (including hydronium and muonium)	
The structure of trans- and cis-3-hexene radical cations stabilised in halocarbon matrices	
at low temperature: an ESR and MNDO/AM1 study, L. Sjöqvist, M. Shiotani and	
A. Lund	141 (1990) 417
Ions and charge carriers	
Time-resolved measurements of the electrodeposition of thallium on silver electrodes by	
optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141 (1990) 175
PHENOMENA	
Molecular structure	
Analysis of the CIPSI/DCCI approach to characterize the HF and F ₂ single bond,	
M. Merchan, JP. Daudey, R. Gonzalez-Luque and I. Nebot-Gil	141 (1990) 285
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+,	
P. Botschwina and P. Sebald	141 (1990) 311
The harmonic force field and r_z molecular structure of disulphur monoxide, S_2O ,	
C.J. Marsden and B.J. Smith	141 (1990) 325
An ab initio study of many isomers of S ₂ O ₂ . A combined theoretical and experimental	
analysis of the harmonic force field and molecular structure of cis-planar OSSO,	
C.J. Marsden and B.J. Smith	141 (1990) 335
Geometry relaxation effects in the 1 B ₂ and 2 A ₁ states of cis-1,3-butadiene, P.G. Szalay,	141 (1000) 255
A. Karpfen and H. Lischka	141 (1990) 355
The structure of trans- and cis-3-hexene radical cations stabilised in halocarbon matrices	
at low temperature: an ESR and MNDO/AM1 study, L. Sjöqvist, M. Shiotani and A. Lund	141 (1990) 417
A. Luid	141 (1990) 417
Vibrations and rotations of molecules	
The torsional energy levels of ethylene: interpretation in terms of two internal modes,	
R. Wallace	141 (1990) 241
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+,	141 (1000) 211
P. Botschwina and P. Sebald The hormonic force field and a malecular structure of disulphus manaride S.O.	141 (1990) 311
The harmonic force field and r_z molecular structure of disulphur monoxide, S_2O ,	141 (1990) 325
C.J. Marsden and B.J. Smith An ab initio study of many isomers of S ₂ O ₂ . A combined theoretical and experimental	141 (1990) 323
analysis of the harmonic force field and molecular structure of cis-planar OSSO,	
C.J. Marsden and B.J. Smith	141 (1990) 335
C.J. Marsach and D.J. Shiftin	141 (1770) 333
Electronic structure and states	
A model for the relative intensities among ion pair -valence transitions in the heavier hal-	141 (1000) 225
ogens and rare gas halides, P. Jewsbury and K. Lawley	141 (1990) 225
An ab initio study of many isomers of S ₂ O ₂ . A combined theoretical and experimental	
analysis of the harmonic force field and molecular structure of cis-planar OSSO, C.J. Marsden and B.J. Smith	141 (1990) 335
Geometry relaxation effects in the 1 B ₂ and 2 A ₁ states of cis-1,3-butadiene, P.G. Szalay,	141 (1990) 333
A. Karpfen and H. Lischka	141 (1990) 355
75. Penipion and 11. Disting	111 (1770) 333

The electronic states of the azines. II. Pyridine, studied by VUV absorption, near-threshold electron energy loss spectroscopy and ab initio multi-reference configuration interaction calculations, I.C. Walker, M.H. Palmer and A. Hopkirk	141 (1990) 365
Electric and magnetic properties	
Effect of a high magnetic field on the degenerate S-S transitions of organic molecules in amorphous matrices via hole burning: Zn-phthalocyanine in polyvinylbutyral, N.I. Ulitsky, B.M. Kharlamov and R.I. Personov	141 (1990) 441
Molecular interactions	
An ab initio study of the CO ₂ C ₂ H ₂ binary complex, W.B. De Almeida	141 (1990) 297
Spectral bandshapes and intensities	
Calculated spectroscopic properties for NCCN, CNCN, CNNC and HNCCN+, P. Botschwina and P. Sebald	141 (1990) 311
Coupling of electronic and nuclear motion	
Dielectric image effects in environmental reorganization free energies and inter-reactant work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 117
Energy transfer processes	
The energy pooling processes between $Zn(4^3P_J)$ atoms, H. Umemoto, A. Masaki, J. Kikuma and S. Sato	141 (1990) 457
Molecular photophysical processes	
Geometry relaxation effects in the 1 ¹ B ₂ and 2 ¹ A ₁ states of cis-1,3-butadiene, P.G. Szalay, A. Karpfen and H. Lischka	141 (1990) 355
Intramolecular dynamics	
Stretch-bend coupling effect on the intramolecular vibrational relaxation in a two-mode model of CH overtone excited fluoroform, A. García-Ayllón and J. Santamaría	141 (1990) 197
-radiationless transitions	
Dielectric image effects in environmental reorganization free energies and inter-reactant	
work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 117
-vibrational energy redistribution (including vibrational dissociation)	
The torsional energy levels of ethylene: interpretation in terms of two internal modes,	
R. Wallace	141 (1990) 241
Non-linear responses (including optical)	
Time-resolved measurements of the electrodeposition of thallium on silver electrodes by	
optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141 (1990) 175
Effective two-level reduction of N-level system dissipative quantum dynamics, P. Baňacký	141 (1990) 249
Multiphoton phenomena	
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals.	
Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431

Reactions (including dissociation)	
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals.	
Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431
-gas phase	
Resonance emission studies of the photodissociating water molecule, R.J. Sension,	
R.J. Brudzynski, B.S. Hudson, J. Zhang and D.G. Imre	141 (1990) 393
Classical dynamics of the $O({}^{3}P) + CS(X^{1}\Sigma^{+}) \rightarrow CO(X^{1}\Sigma^{+}) + S({}^{3}P)$ reaction on the ground	141 (1770) 373
triplet potential energy surface, R. Sayós, M. González and A. Aguilar	141 (1990) 401
triplet potential energy surface, R. Sayos, M. Conzaicz and A. Agunai	141 (1550) 401
-condensed phase	
The reduction of dissociation/recombination theory to one-dimensional form, S. Nordholm	
and M.G. Sceats	141 (1990) 261
Bell-shaped curves of the enzyme activity in reverse micelles: a simplified model for hy-	
drolytic reactions, M. Bianucci, M. Maestro and P. Walde	141 (1990) 273
Tunnelling	
Dielectric image effects in environmental reorganization free energies and inter-reactant	
work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 117
Electron transfer reactions on passive iron electrodes, P. Meisterjahn, J.W. Schultze,	
B. Siemensmeyer, U. Stimming and M.H. Dean	141 (1990) 131
Effective two-level reduction of N-level system dissipative quantum dynamics, P. Baňacký	141 (1990) 249
Electron transfer	
The impedance of a plane electrode with a circular electro-active area both in the ideally	
polarized and the activation-controlled case, W.H. Mulder and J.H. Sluyters	141 (1990) 105
Dielectric image effects in environmental reorganization free energies and inter-reactant	()
work terms of metalloprotein electron transfer reactions, Yu.I. Kharkats and J. Ulstrup	141 (1990) 117
Electron transfer reactions on passive iron electrodes, P. Meisterjahn, J.W. Schultze,	
B. Siemensmeyer, U. Stimming and M.H. Dean	141 (1990) 131
Charge transport in electroactive polymers consisting of fixed molecular redox sites,	, , , , , , , , , , , , , , , , , , , ,
E.F. Dalton, N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray	141 (1990) 143
Ultrafast electron injection from excited dye molecules into semiconductor electrodes,	, , ,
R. Eichberger and F. Willig	141 (1990) 159
Ionization (including Rydberg states)	
An experimental and theoretical investigation of the valence orbital momentum distri-	
butions and binding energy spectra of nitrogen, J.P.D. Cook, R. Pascual, E. Weigold,	
W. von Niessen and P. Tomasello	141 (1990) 211
Photodissociation of jet-cooled acetylacetonato complexes of the first transition metals.	
Free metal generation and fragmentational ionization, N. Mikami, R. Ohki and H. Kido	141 (1990) 431
Malanda and a Calaba Profession	
Molecular motion (including diffusive)	141 (1000) 07
Computer simulation of the water/platinum interface. Dynamical results, E. Spohr	141 (1990) 87
The reduction of dissociation/recombination theory to one-dimensional form, S. Nordholm and M.G. Sceats	141 (1000) 261
	141 (1990) 261
Fluorescence decay of solvated polar molecules in an electric field, O. Rolinski, A. Balter and A. Kowalczyk	141 (1990) 265
and A. Nowalczyk	141 (1990) 203

Surface effects and catalysis			
In situ probing of step and terrace sites on $Pt(S)-[n(111)\times(111)]$ electrodes, J. Clavilier,			
K. El Achi and A. Rodes	141	(1990)	1
In situ probing of step and terrace sites on $Pt(S)-[n(111)\times(111)]$ electrodes, J. Clavilier,			
K. El Achi and A. Rodes	141	(1990)	1
Optical behavior of liquid mercury-electrolyte interface studied by surface plasmon excitation, A. Tadjeddine, A. Rahmani and M. Costa	141	(1990)	15
Surface vibrational spectroscopy. A comparison of the EELS spectra of organic adsorbates	141	(1990)	13
at Pt(111) with IR and Raman spectra of the unadsorbed organics, B.E. Kahn,			
S.A. Chaffins, J.Y. Gui, F. Lu, D.A. Stern and A.T. Hubbard	141	(1990)	21
Infrared spectroelectrochemical measurements of the electrochemical double layer: using		,	
carbon monoxide as a double layer probe molecule, A.E. Russell, S. Pons and			
M.R. Anderson	141	(1990)	41
Optical studies on the quenching of the SERS activity of silver electrodes, G. Kannen and			
A. Otto	141	(1990)	51
Long-range correlation between polar molecules adsorbed onto a dielectric solid, J.P. Badiali			
and F. Forstmann		(1990)	
Computer simulation of the water/platinum interface. Dynamical results, E. Spohr		(1990)	
A model for the adsorption of metal ions on single crystal surfaces, W. Schmickler	141	(1990)	95
Time-resolved measurements of the electrodeposition of thallium on silver electrodes by	1.41	(1000)	175
optical second-harmonic generation, J.M. Robinson and G.L. Richmond	141	(1990)	1/3
Thermodynamic and transport properties			
Charge transport in electroactive polymers consisting of fixed molecular redox sites,			
E.F. Dalton, N.A. Surridge, J.C. Jernigan, K.O. Wilbourn, J.S. Facci and R.W. Murray	141	(1990)	143
Structure of solids and liquids			
Explicit formulae for the ion and solvent profiles in the electric double layer using the mean			

spherical approximation, D. Henderson

141 (1990) 79

